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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,195	10/28/2005	Detlef Baranski	021500-135	7014
21839 7590 10/31/2007 BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			EXAMINER KARACSONY, ROBERT	
			ART UNIT 2821	PAPER NUMBER
			NOTIFICATION DATE 10/31/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/528,195

Applicant(s)

BARANSKI, DETLEF

Examiner

Robert Karacsony

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/28/2005</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because applicant incorrectly references the strip-like portion by the letter (S) instead of (5). Correction is required. See MPEP § 608.01(b).
2. The disclosure is objected to because of the following informalities: Page 3, line 10 and page 15, lines 5, 6, 8 and 9 of the Specification contains illegible text. Appropriate correction is required.
3. The disclosure is objected to because of the following informalities: Page 7, paragraph 3 contains three instances of the character '□', which is unclear to the examiner. Appropriate correction is required.

Claim Objections

4. Claim 8 is objected to because of the following informalities: On line 3 of claim 8, applicant recites the limitation "which strip-like portion projects". For examination purposes, examiner interprets this limitation as "which the strip-like portion projects" Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claim 1: On lines 3-4 of claim 1, applicant recites the limitation "which antenna pane the coating". It is unclear to the examiner what the applicant is trying claim by this limitation. For examination purposes, examiner interprets the claim as "which the coating".

Also, in lines 7-8 of claim 1, it is unclear what the applicant means by the limitation "by contacting in the contact areas at its two longitudinal sides and by its outer dimensions".

Examiner does not know what type of contact is made by applicant's recitation of **"by contacting in the contact areas"**.

Lastly, the limitation "the contact areas" lacks antecedent basis.

8. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear to the examiner how "a heatable area electrically isolated from an area of the coating adjacent to the segmented surface portion by at least one of the barrier lines". Since the barrier lines define the segmented surface portion, it is not possible that the heatable area be separated by at least one of the barrier lines. For examination purposes, examiner will interpret the claim as the heatable area being separated from the segmented surface portion.

9. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear how "the heatable area is provided with at least some of the barrier lines influencing distribution of heating current". For the reasons discussed above for claim 9, it

is not understood how this is possible. For examination purposes, examiner interprets this claim as "the heatable area is provided with lines influencing distribution of heating current".

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1, 2, 4, 13-15 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Walton et al.* (US 5,355,144, hereinafter *Walton*) in view of *Ishikawa et al.* (US 6,239,757, hereinafter *Ishikawa*).

Claim 1: *Walton* teaches an antenna pane comprising:

at least one glass pane (100, fig. 10) and at least one electrically conductive coating (105, fig. 10), which further comprises a slot (104, fig. 10) antenna to transmit/receive electromagnetic waves.

Walton fails to teach the coating is subdivided by barrier lines into a number of electrically isolated segments on which the coating incorporates at least one strip-like segmented surface portion in which the distance between the barrier lines is so small that the coating there can transmit HF radiation in a specified frequency range, wherein the segmented surface portion is constructed as a slot antenna for electromagnetic radiation in the range of frequencies which the segmented surface portion can transmit. However, *Walton* suggests the use of other shapes for making the slot of the antenna (col. 9/lines 41-42). *Ishikawa* teaches the use of a slot antenna

(33) made up of lattice slots (32). It would have been obvious to one of ordinary skill in art at the time the invention was made to have substituted one known slot antenna with another since both are simply antenna capable of electromagnetic radiation and the substitution would have yielded predictable results to one of ordinary skill in the art at the time the invention was made. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have substituted the antenna of *Ishikawa* with the antenna of *Walton* since the are the substitution would have yielded predictable results.

Claim 2: If the modifications to the invention of *Walton* were made, as discussed above, one with ordinary skill in the art would have realized the barrier lines within the segmented surface portion form a lattice raster with a constant raster unit size (fig. 4 of *Walton*).

Claims 4, 14 and 15: If the modifications to the invention of *Walton* were made, as discussed above, one with ordinary skill in the art would have realized the barrier lines within the segmented surface portion have at least partly a non-rectilinear form, wherein the non-rectilinear form is a zigzagged form. (fig. 4 of *Walton* illustrated the lines crossed).

Claims 13 and 20: If the modifications to the invention of *Walton* were made, as discussed above, one with ordinary skill in the art would have realized the segmented surface portion is surrounded on all sides by the electrically conductive coating (fig. 10 of *Walton*).

Claim Rejections - 35 USC § 103

12. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Walton* in view of *Ishikawa* as applied to claim 1 above, and further in view of *Paulus et al.* (US 5,898,407, hereinafter *Paulus*).

Claims 9, 10 and 18: *Walton* in view of *Ishikawa* teach all of the limitations of claim 1, as discussed above. They fail to teach the coating incorporates a heatable area electrically isolated from an area of the coating adjacent to the segmented surface portion and provided with bus bars, wherein the heatable area is provided with lines influencing distribution of heating current. However, *Walton* teaches providing bus bars at opposite ends of the windshield to utilize the metal film as a defroster (col. 8/lines 10-17). *Paulus* teaches a slot antenna comprised of a metal coating, which incorporates a separate heating element comprising bus bars and additional heating elements (fig. 9, col. 9/lines 25-33). It would have been obvious to one of ordinary skill in art at the time the invention was made to have substituted one known heating element with another since both are simply heating elements capable of defrosting and the substitution would have yielded predictable results to one of ordinary skill in the art at the time the invention was made. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have substituted the heating element of *Paulus* with the heating means of *Walton*, since both are simply heating elements capable of defrosting and the substitution would have yielded predictable results to one of ordinary skill in the art.

13. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Walton* in view of *Ishikawa* and *Paulus* as applied to claim 9 above, and further in view of *Murakami et al.* (US 5,307,076, hereinafter *Murakami*).

Claim 11: *Walton* in view of *Ishikawa* and *Paulus* teaches all of the limitations of claim 9, as discussed above. They fail to teach the heatable area is wired as an antenna for VHF and/or AM range. However, *Murakami* teaches the use of using the defroster as an AM antenna (col. 1/lines 57-61). Since it was well known to one having ordinary skill in the art at the time the

invention was made to receive AM signals in automobiles, it would have been obvious to have utilized the heating elements of the combined invention of *Walton* in view of *Ishikawa* and *Paulus* as antennas, as taught by *Murakami*, in order to have received AM signals.

14. Claims 5, 12, 16 and 19 are considered a suggested use limitation and are not given any patentable weight. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex Parte Masham*, 2 USPQ F.2d 1647 (1987).

15.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Karacsony whose telephone number is 571-270-1268.

The examiner can normally be reached on M-F 7:30 am - 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas W. Owens can be reached on 571-272-1662. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RK QK

/Hoang V Nguyen/
Primary Examiner, AU 2821